

PSR-SPP- 24DC/URD3/4X1/2X2/T 2 - Extension module



2981729

<https://www.phoenixcontact.com/us/products/2981729>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



The figure shows a version with a screw connection

1-channel contact extension with TBUS interface, 4 N/O contacts, 1 N/C contact, 1 confirmation current path, 2 sec. dropout delay, Cat. 3, PL d in accordance with EN ISO 13849, width: 22.5 mm, plug-in Push-in terminal block

Your advantages

- Up to Cat. 3/PL e in accordance with EN ISO 13849-1, SIL 3 in accordance with EN IEC 62061, SIL 3 in accordance with IEC 61508
- Each with 4 enabling, 1 signaling, and 1 confirmation current path, all with dropout delay
- 1-channel control

Commercial data

Item number	2981729
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DN01
Product key	DNA232
GTIN	4046356101882
Weight per piece (including packing)	232.2 g
Weight per piece (excluding packing)	204 g
Customs tariff number	85371099
Country of origin	DE

PSR-SPP- 24DC/URD3/4X1/2X2/T 2 - Extension module



2981729

<https://www.phoenixcontact.com/us/products/2981729>

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

Product properties

Product type	Safety relays
Application	Extension module
Control	1-channel
Mechanical service life	approx. 10^7 cycles
Relay type	Electromechanical relay with force-guided contacts in accordance with IEC/EN 61810-3

Insulation characteristics: Air clearances and creepage distances between the power circuits

Overvoltage category	III
Degree of pollution	2

Electrical properties

Maximum power dissipation for nominal condition	2.02 W
Nominal operating mode	100% operating factor

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V
Rated surge voltage/insulation	4 kV / basic isolation (safe isolation, reinforced insulation and 6 kV between input circuit/N/C contacts and enabling current paths).

Input data

General

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.85 ... 1.1
Typical input current at U_N	84 mA
Typical response time	20 ms
Typical release time	2 s
Recovery time	1 s
Protective circuit	Surge protection; Suppressor diode Fuse; PTC resistor
Operating voltage display	Green LED
Status display	LED (green)

Output data

Contact switching type	4 delayed enabling current paths 1 delayed signaling current path
------------------------	--

PSR-SPP- 24DC/URD3/4X1/2X2/T 2 - Extension module



2981729

<https://www.phoenixcontact.com/us/products/2981729>

	1 delayed confirmation current path
Contact material	AgSnO ₂
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	15 V AC/DC
Limiting continuous current	6 A (N/O contact)
	3 A (N/C contact)
Maximum inrush current	6 A (N/O contact)
	3 A (N/C contact)
Inrush current, minimum	25 mA
Sq. Total current	$50 \text{ A}^2 (I_{\text{TH}}^2 = I_1^2 + I_2^2 + I_3^2 + I_4^2)$
Interrupting rating (ohmic load) max.	114 W (24 V DC, $\tau = 0 \text{ ms}$, N/C contact 65/66: 72 W)
	288 W (48 V DC, $\tau = 0 \text{ ms}$)
	77 W (110 V DC, $\tau = 0 \text{ ms}$)
	88 W (220 V DC, $\tau = 0 \text{ ms}$)
	1500 VA (250 V AC, $\tau = 0 \text{ ms}$, N/C contact 65/66: 750 VA)
Maximum interrupting rating (inductive load)	48 W (24 V DC, $\tau = 40 \text{ ms}$)
	40 W (48 V DC, $\tau = 40 \text{ ms}$)
	35 W (110 V DC, $\tau = 40 \text{ ms}$)
	33 W (220 V DC, $\tau = 40 \text{ ms}$)
Switching power min.	0.4 W
Switching capacity (360/h cycles)	6 A (24 V DC)
	5 A (230 V AC)
Switching capacity (3600/h cycles)	3 A (24 V (DC13))
	3 A (230 V (AC15))
Output fuse	10 A gL/gG NEOZED (N/O contact)
	4 A gL/gG NEOZED (N/C contact)

Connection data

Connection technology

pluggable	yes
-----------	-----

Conductor connection

Connection method	Push-in connection
Conductor cross-section, rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross-section AWG	24 ... 16
Stripping length	8 mm

Dimensions

Width	22.5 mm
Height	112 mm
Depth	114.5 mm

Material specifications

PSR-SPP- 24DC/URD3/4X1/2X2/T 2 - Extension module



2981729

<https://www.phoenixcontact.com/us/products/2981729>

Color	yellow
-------	--------

Characteristics

Safety data

Stop category (EN 60204-1)	1
----------------------------	---

Safety data: EN ISO 13849

Performance level (PL)	d
------------------------	---

Safety data: IEC 61508 - High demand

Safety Integrity Level (SIL)	2
------------------------------	---

Safety data: EN IEC 62061

Safety Integrity Level (SIL)	2
------------------------------	---

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP54 IP20
Min. degree of protection of inst. location	IP54
Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Max. permissible humidity (storage/transport)	75 % (on average, 85% infrequently, non-condensing)
Max. permissible relative humidity (operation)	75 % (on average, 85% infrequently, non-condensing)

Standards and regulations

Air clearances and creepage distances between the power circuits

Standards/regulations	DIN EN 50178/VDE 0160
-----------------------	-----------------------

Mounting

Mounting type	DIN rail mounting
Mounting position	any

PSR-SPP- 24DC/URD3/4X1/2X2/T 2 - Extension module

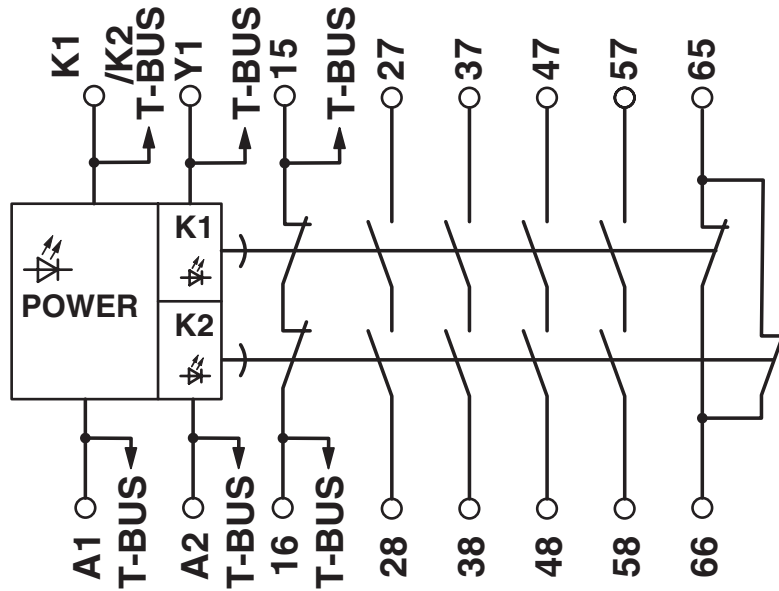


2981729

<https://www.phoenixcontact.com/us/products/2981729>

Drawings

Circuit diagram



Block diagram

PSR-SPP- 24DC/URD3/4X1/2X2/T 2 - Extension module



2981729

<https://www.phoenixcontact.com/us/products/2981729>

Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com